Memorandum

To: LATAG Board

From: Steve Ackerlund and Tony Ward, Technical Consultants to LATAG

Date: 8/3/2013

Re: Briefs on multiple reports released by EPA June-July 2013

The LATAG Board requested their technical consultants to coordinate on brief reviews of various reports recently released by EPA on the Libby Superfund site. The objective of these brief reviews is to identify key findings of likely interest to LATAG and to assess if more detailed or critical review is recommended.

Former Export Plant Site (OU1), Final Remedial Action Report, July 8, 2013

- 1. Report Objective: Summarizes remedial work accomplished, including as-builts.
- 2. Key Findings: Remedial action work included: excavation and disposal of contaminated soil with backfill using clean material, riverbank revetment, boat ramp restoration, and erosion and stormwater control. Confirmation sampling indicated that "the majority of the site's exposed finished grade is at concentrations less than 1 percent LA", and that covers would break remaining pathways. All daily work audits and final inspections indicated that work was successfully completed according to design.

3. Next Steps:

- a. This area will continue to be used as a city park, by David Thompson Search and Rescue, and contain undeveloped areas. Institutional Controls (ICs) are in-place involving One Call Locate to preclude disturbance of buried asbestos or other concerns, and permit requirements for work in rights-of-ways. Routine site inspections are to be performed "at least annually", and Fiveyear Reviews of remedy integrity will be performed by EPA.
- b. A risk assessment will be conducted to evaluate protectiveness of the remedy as implemented. Additional actions such as deeper excavation, improved covers, and strengthened IC may be implemented if needed.

- a. No further review of this document is warranted.
- b. Future detailed review of the post construction risk assessment is recommended to ensure the claimed protections are achieved.
- c. LATAG may want more information from the agencies on who and how ongoing inspections and reviews will be conducted. Maintaining the remedy is key to ensuring public health protection.

Final Remedial Investigation Report for OU5 (former Stimson Lumber Mill), June, 2013

1. Report Objective: Describes the nature and extent of LA contamination.

2. Key Findings:

- a. Activity Based Sampling (ABS) from most buildings contained detectable LA.
- b. ABS detected LA in seven of eight outdoor worker areas.
- c. No LA was detected for ABS at the MotoX site or for spectators at the MotoX site.
- d. 28 of 87 indoor dust samples contained ABS, with four samples exceeding removal action criteria of 5,000 LA structures per square centimeter).
- e. Soils samples measured by polarized light microscopy (PLM) were generally non-detect or trace. The former Tree Nursery on the north central portion of the site had consistently higher levels of LA.
- f. 19 bark samples found 1 sample with detectable levels by PLM and 13 samples detectable by Transmission Electron Microscopy (TEM). EPA recognizes these results provide only "qualitative" understanding of LA concentrations in bark.

3. Next Steps:

- a. Most of the property is currently oriented toward occupational use. There is some recreational use of the property (dirt biking and walking). Residential sites are nearby. Kootenai Business Park Industrial District is the current owner. Site redevelopment options are being considered.
- Past removal actions include: various soil removals, removal of vermiculatecontaining materials, rip-rap replacement, and fencing off the former Tree Nursing Area.
- c. An evaluation of risk will be provided by the site-wide human health risk assessment. An ecological risk assessment will also be conducted. A feasibility study to identify remediation needs will follow.

- a. No further review of this document is warranted. Adequate sampling and good quality data appear to define site concentrations of LA.
- b. Future detailed review of the human health and ecological risk assessment is recommended.
- c. LATAG may want to proactively understand how ecological risk assessment will be conducted. While it is likely that available data are sufficient to support ecological risk assessment, this issue is not explicitly addressed.

Remedial Investigation Report Addendum for Calendar Year 2011, OU7 (Residential Area), July 2013

1. Report Objective: Updates the draft final RI report by presenting results for data collected in 2011 to define the nature and extent of LA contamination and summarizing remedial actions taken in 2011.

2. Key Findings:

- a. One or more LA fibers were detected in 27 of 556 ambient air samples collected as of December 31, 2011.
- b. TAPE inspections were conducted at 35 parcels in 2011, with two identified for removal actions.
- c. 31 sampling events conducted in 2011.
- d. 62 of 208 soil samples identified trace (<0.2 percent by weight) asbestos.
- e. Six removal actions in 2011, bringing the total to 105.
- f. 251 ABS samples were collected in 2011. One or more LA fibers was detected in seven Category A (soil removal not required because concentrations are below removal criteria) involving various yard tasks ad bicycling; six Category B (soil removal performed) involving digging, racking and bicycling; and 10 community wide disturbance scenario samples involving driving, bicycling and sports fields.

3. Next Steps:

- a. Evaluate if continued ambient air sampling is needed.
- b. Conduct an LA background study for soils.
- c. Complete data quality reviews.
- d. Complete inspections and removal actions as needed and as voluntary recruitment allows. A 2012 report is expected.
- e. Conduct a human health risk assessment and feasibility study to determine if additional remedial actions are necessary.

- a. No further review of this document is warranted. Work is proceeding according to routine methods with no major changes noted.
- b. Future detailed review of the human health risk assessment is recommended. Two important pieces of information in this assessment will be the background soil study and the ABS data. LATAG may want to plan for a detailed review of the background soil study and brief reviews of historic information on ABS data. The more proactive we are in reviewing this information and identifying critical needs, the more likely it is that our requests will be considered and applied to the risk assessment.

Final Remedial Action Report Operable Unit 8, Local and State Highways in Libby and Troy, June 2013

1. Report Objective: Presents sampling results for data collected along area roads within 30 miles of Libby.

2. Key Findings:

- a. 88 of 485 surface soil samples had trace LA. Generally, each sample consisting of 10-point composites representing 1,000 feet of roadway. Higher levels were found between Libby and Rainy Creek Road, where ore trucks used to travel.
- b. Visible vermiculate was identified along the far eastern end of State Highway 37; however, polarized light microscopy analysis of these samples did not detect LA. No explanation for this possible discrepancy is known.
- c. ABS sampling included ATV riding, grass cutting/bush hogging, and rotomilling of asphalt. ATV and grass cutting/bush hogging sampling was done on State Highway 37 between Libby and Rainy Creek, in the area of most soil detections. Rotomilling sampling was conducted along Highway 37 in downtown Libby near California Avenue where trace LA had been detected in soil.
 - i. Eight of 34 ATV and grass cutting/bush hogging samples contained detectable LA fibers.
 - ii. Zero of 10 rotomilling samples contained detectable LA fibers.
 - iii. One of 51 inner perimeter samples contained detectable LA fibers.
- d. Zero of 25 ambient air monitoring stations placed along roads away from ABS activities had detectable LA fibers.

3. EPA's Next Steps:

a. A risk assessment will be conducted to evaluate protectiveness of the remedy as implemented.

- a. Limited additional inquiry of this document is warranted. The visible vermiculate versus soil analysis for the far eastern end of State Highway 37 should be investigated further. This area may be dropped from further consideration for remediation. Should TEM have been used for vermiculite samples? Also there is potential for bark contamination in trees along these corridors. Perhaps LATAG can offer insight based on historical area uses and activities?
- b. Future detailed review of the human health and ecological risk assessments are recommended. Prior to the risk assessment, a brief review of the work plan and/or report for the background soil study is recommended. More detailed understanding of ABS sampling methods may also be useful background information supporting a critical review of the risk assessment.

Libby Superfund Site Community Engagement Plan Addendum, June 30, 2013

1. Report Objective: provides an update to the 2010 Community Engagement Plan by identifying what EPA has done for community involvement.

2. Key Findings:

- a. The report documents long lists of activities that EPA has done to get information to the public and receive feedback. It's an impressive list. EPA is taking this responsibility seriously and closely tracking their performance.
- b. 46 interviews were conducted with area citizens having a range of prior involvement and familiarity with the Superfund project. Perhaps the most important finding from these interviews is that most people feel adequately informed about the Superfund project and know where they need to go to get information if they want it. Also, there seems to be overall support for the effort and perhaps even a good enough sense of satisfaction with the quality of the work.
- c. A long list of local area organizations and groups is provided. This can be an important reference list to LATAG for future outreach.

3. EPA's Next Steps:

a. EPA policy dictates that this report be updated regularly.

- a. EPA could be asked to do more with the information provided in this document, particularly the interviews. A number of ideas are provided in Attachment 3 (where the interview information is presented) that might be acted on to improve public participation.
- b. LATAG might invest meeting time to go over each section of Attachment 3 to stimulate thinking on what we might do better. Key sections include: 5.3.4 on information people would like to receive; 5.3.5 on how people like to receive information; Section 5.3.8 as pertains to critiques of TAG/CAG; and 5.3.10 on concerns for Libby/Troy's future and ICs.